Source Water Protection Program

2006 Updated SWP Project Priority List

SWP	BP	Pop.	WaterSystem Name	Project No	WS Problem	Project Description	Costs	FY
SWWP-A	11	50	SOUTH SAN JOAQUIN IRRIGATION DISTRICT	5010040 002	Primary concern is microbial contamination from 1)cattle activities on watershed, 2) sanitary facilities (pit toilets) in the recreational areas, and 3) body contact recreation at the reservoir. This project would address all three sources.	Project will include berming and fencing the canal at critical areas to preclude cattle access, rerouting selected drains to prevent direct discharge of ag drainage to canal, construction of new sanitary facilities at the park to eliminate pit toilets, po	$2,000,000	2000
	11	926	Squaw Valley Public Service District	3110020 004	The attached Draft Squaw Valley source Water Assessments describes the types of contaminants and the associated PCAs. The document also provides a relative ranking of the well exposure to potential sources of contamination.	Squaw Valley PSD Source water Protection Program. The project will identify, locate and map test wells, monitoring wells and abandoned wells that may create a conduit for contaminants to enter the groundwater. More than 50s of these wells exist.	$75,000	2001
	11	883625	San Francisco Regional Water System	3810001 122	(SFPUC No. 21) (Contaminants of concern are essentially microbial, potential from VOCs; sources of these contaminants are farms ranches, dwellings etc within the Upper Alameda Creek Watershed	VOC sources would be addressed by acquisition of critical watershed land within high water quality vulnerability ; Upper Alameda Creek Watershed	$2,000,000	2000
	8	9920	Nevada ID - Loma Rica	2910006 022	Microbial from human and animal contact and septic systems; DBP precursors from organic load; contaminants in runoff from upslope urban area and roads	Relocate source water from 37,000 ft of canal and 90 AF regulating reservoir to 22,000 ft buried pipeline; deliver water via closed conduit from the source (Deer Creek) to the WTP.	$2,000,000	2005
	8	12562	Nevada ID - E. George, Banner Mountain	2910004 007	Microbial from human and animal contact and septic systems; DBP precursors from organic load; contaminants in runoff from upslope urban area and roads	Relocate source water from 28,000 ft of canal to 10,000 ft buried pipeline; deliver water via closed conduit from the source (Deer Creek) to the WTP.	$2,000,000	2005
	7	20772	Santa Fe I.D.	3710023 001	SWPP Joint reservoir project; urban runoff contaminants impact raw water quality	SWPP Joint reservoir project; urban runoff collection/diversion system	$2,000,000	2000
	7	448980	FRESNO, CITY OF	1010007 011	SWP-Enterprise Canal; groundwater overdraft and a declining water table have dictated construction of a 20MGD surface water treatment plant in NE Fresno. The raw water conveyance to this facility includes a 25 mile reach of unlined irrigation canal that i	Protect canal from erosion, agdrainage and tail water discharges. Plan and implement appropriate improvements identified in the San Joaquin Sanitary Survey. Provides water quality protection for water supply to the Surface WTP facility and will reduce th	$1,100,000	2002
	4	600	NORTH EDWARDS WD	1510052 005	Septic tanks are installed in Zone A, B5 and B10 of Wells #1 and #2.	At present, there are vacant lots next to Wells 1 and 2. The Board of Directors would like to acquire the empty lots to prevent any more septic system installation close to the well heads.	$24,000	2002

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SWWP-A	3	1576	Willow Creek C.S.D.	1210015	002	Storm Water Bypass- Willow Creek CSD water supply; Storm water runoff from state highways 299, 96 and county roads are collected by a storm water system and discharged into Willow Creek at a point up stream from the WCCSD infiltration gallery (WCCSD water	Design and construct storm water interceptor and bypass of water system infiltration galleries.	$80,000	2002
	3	2000	North Marin WD - Pt. Reyes	2110006	021	Micribial and chemical contamination associated with impacts of flooding of Lagunitas Creek on Wells 2 and 3.	As determined by feasibility study-modifications to wellheads, well casings, enclosures and surface grading and drainage. Study due 8/31/2000 per 10/28/99 Water Supply Permit.	$100,000	2000
	3	58200	North Marin Water District	2110003	001	Dairy directly adjacent to reservoir. Reclassify from SRF to SWPP (6/11/01).	Develop Crypto Control Strategy installation of BMPs, sediment control structures, land/dairy purchase. Reclassify from SRF to SWPP (6/11/01).	$122,000	1998
	0	230000	Contra Costa Water District	0710003	022	There are over 250 individual, unfiltered storm drain connections to the canal. PCAs include microbial contaminations (including potential fecal contamination) from diary and other agricultural land drainage into Canal; hydrocarbon, chemical and others.	Storm Drainage Management Program	$2,000,000	2004
	0	1300000	East Bay MUD	0110005	020	SWPP Cryptosporidium and other pathogens have been identified with grazing activity near reservoirs and tributaries; project will address direct access of cattle / horses to ponds, streams / reservoirs in the East Bay Watershed.	SWPP EB watershed fencing to mitigate Cryptosporidium contamination. The project would (1) outfence approzimately 30 ponds to prevent direct access of domestic animals ot the ponds and supply alternative trough watering facilities at each pond site, an	$2,000,000	2001
Total of projects in SWPP Category SWWP-A = 13 projects									
Total Cost for Projects in Category SWWP-A :						**$15,501,000**			
SWWP-B	3	5412	Montara Water and Sanitary District	4110010	021	Nitrate contamination in the Airport 3 and North Airport 2 wells is apparently migrating from agricultural property to the east. Nitrate concentrations often exceed the MCL. A shallow aquifer and proximity to the source make mitigation impossible.	Our project would focus on evaluating adjacent agricultural practices and education on BMPs, land acquisitions and /or establishing conservation easements.	$150,000	2000
	0	7434	GOLDEN HILLS CSD	1510045	007	SWPP Rising nitrate levels due to every residence using septic systems. Ground water management.	SWPP Complete source water protection plan. Hire necessary engineers and hydrologists.	$50,000	2001
Total of projects in SWPP Category SWWP-B = 2 projects									
Total Cost for Projects in Category SWWP-B :						**$200,000**			

SWP	BP	Pop.	WaterSystem Name	Project No		WS Problem	Project Description	Costs	FY
SWWP-C	5	7200	Los Osos Community Services District	4010016	003	Groundwater WQ Monitoring Program-See attachment A	See attachment A	$500,000	2000
	5	7200	Los Osos Community Services District	4010016	001	Septic system abatement Project	See attachment A	$2,000,000	2000
	4	110	Yosemite Alpine CSD	2210923	001	A protected watershed for the entire Fish Camp area is being propsed. No other watersheds exist in the Fish Camp area. Development of the proposed watershed area would place (4) water systems in jeopardy of becoming contaminated and/or over drafted	Create a common watershed to ensure an adequate long term supply of uncontaminated water for the entire Fish Camp area. The proposed watershed is of very high water quality. Due to ist protected loc, the water quality can be maintained w/o risk of conta..	$2,000,000	2004
	3	4280	CalAm - Arden	3410045	004	Nitrate contamination in the Fulton Fair Oak well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeing one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study,we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	$125,000	2000
	3	18232	CalAm - Rosemont	3410034	006	Nitrate contamination in the Montazuma well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	$125,000	2000
	3	34082	CalAm - Suburban	3410010	006	Nitrate contamination in the Point Reyes well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	$125,000	2000
	3	34082	CalAm - Suburban	3410010	005	Nitrate contamination in the Malaga well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	$125,000	2000
	3	34082	CalAm - Suburban	3410010	007	Nitrate contamination in the Whitewater well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring in	$125,000	2000
	3	42000	CalAm - Lincoln Oaks	3410013	010	Nitrate contamination in the Hemlock well is suspected to be associated with sewer or septic sources. Nitrate concentrations exceeding one-half the MCL at this well (in an established subdivision) suggest a localized source.	We propose to initiate a planning study to inventory PCAs, and vulnerability analysis. Based on the results of our study, we anticipate our project will include one or more of the following: Upgrade/abatement of septic systems, water quality monitoring i	$125,000	2000

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SWWP-C	3	135000	SAN BERNARDINO CITY	3610039	017	The City of San Bernardino relies 100% on 47 groundwater wells for its domestic water supply. The Bunker Hill Groundwater Basin has identified plumes of VOCs, nitrates, DPCP, radiological, elevated levels of TDS, and perchlorate in excess of current MCLs.	See attached description of project	$400,000	2000
Total of projects in SWPP Category SWWP-C = 10 projects									
Total Cost for Projects in Category SWWP-C :						**$5,650,000**			
SWWP-D	11	46900	South Tahoe PUD - Main	0910002	001	MTBE contamination from leaking underground fuel tanks has contaminated or is threatening to contaminate 12 District wells. The 12 wells have been shut off.	The district intends to implement a groundwater management plan, in full compliance with DWSAP assessments, that emphasizes the "early detection and immediate response" to MTBE/gasoline releases. To date, the District has prepared a draft ordinance and bu	$1,385,000	2000
	6	750	Cuesta La Honda Guild, Inc.	4110012	002	Vineyard development and resultant siltation and contamination from agricultural pesticides.	The project proposes to acquire the land or a conservation easement on the land immediately adjacent to Tunnel Spring and Woodhams Creek which are the sources of approximately 83% of the surface water... Doing so would prevent development of a vineyard...	$2,000,000	2004
Total of projects in SWPP Category SWWP-D = 2 projects									
Total Cost for Projects in Category SWWP-D :						**$3,385,000**			
SWWP-E	0	48418	RIALTO-CITY	3610038	004	Perchlorate contamination in GW Basin	Drill barrier wells to stop spread of contamination	$2,000,000	2003
Total of projects in SWPP Category SWWP-E = 1 project									
Total Cost for Projects in Category SWWP-E :						**$2,000,000**			
SWWP-F	6	1300000	East Bay MUD	0110005	029	Pardee Reservoir WQ Protection Conservation Easement; Microbial (septic systems), nitrate (from large livestock concentrations or agricultural fertilizers), chemicals (from herbicide/pesticide use)	Establish convervation easement on 700 acres of the watershed; Project addresses disinfection by-products, chemicals and microbial on watershed, not in zones.	$1,100,000	2002
	3	5303	AWA Sutter Creek	0310003	006	System uses a 24 mile open canal, mostly earthen, to transport source water. The Canal is exposed to storm water run-off and livestock. See attached study.	Watershed management projects include fencing to prevent access from livestock, storm water drainage diversions, and related improvements.	$1,131,000	2000
	3	58200	North Marin Water District	2110003	023	Storm events increase level of microbial and agricultural runoff (cattle) and sediments (erosion) impacts to Stafford Lake.	Buffer strip development with possible purchase of conservation easement son ranch property.	$100,000	2000

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SWWP-F	3	58200	North Marin Water District	2110003	025	Horse manure and associated contaminants (microbials, organic precursors to DBP) from stable operation adjacent to tributary to Stafford Lake.	Develop a cooperative horse manure recycle program in conjunction with Marin County Stormwater Control Program.	$15,000	2000
	3	58200	North Marin Water District	2110003	020	Storm events increase level of runoff with microbial and agricultural runoff (cattle) and sediments (erosion) impacts to Stafford Lake.	Construct sediment dams on tributaries of concern.	$60,000	2000
Total of projects in SWPP Category SWWP-F = 5 projects									
Total Cost for Projects in Category SWWP-F :						**$2,406,000**			
SWWP-H	7	175000	Sweetwater Authority	3710025	001	Contaminants include microbial and chemical constituents associated primarily with urban and rural residential development.	Funding would be used to purchase property in sensitive areas in order to provide control over potential microbial and chemical contamination and extend the Authority's ability to protect its source waters. Project will also include additional watershed m	$900,000	2000
	4	883625	San Francisco Regional Water System	3810001	111	(SFPUC No. 1) Microbial contamination from run-off and erosion of banks may be attributed to disrepair of the Alameda Creek tunnel outfall which discharges diverted water into the Calaveras Reservoir.	The contaminants of concern will be addressed by improvements to the tunnel. The slopes on either side of the tunnel will be stabilized and debris will be cleared, which will reduced the contribution of microbial contamination and sedement deposition into	$250,000	2000
	3	1267	CalAm - Isleton	3410012	002	The Isleton 2 well periodically shows evidence of raw water total coliform presence, an indicator of microbial contamination	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	4280	CalAm - Arden	3410045	003	The Larch Ln well periodically shows evidence of raw water totoal coliform presence and indicator of microbial contamination	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	4280	CalAm - Arden	3410045	005	The Fulton/Fair Oak well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	18232	CalAm - Rosemont	3410034	004	The Westporter well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination.	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	18232	CalAm - Rosemont	3410034	005	The Southport well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination.	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000

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SWWP-H	3	21000	CalAm - Antelope	3410031	004	The Davidson well periodically shows evidence of raw water total coliform presence and indicator of microbial contamination	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide Public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	42000	CalAm - Lincoln Oaks	3410013	011	The Crosswoods well periodically shows evidence of raw water total coliform presence, an indicator of microbial contamination.	We propose to initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education propgrams along with program elements associated with CDWSAPP	$95,000	2000
	3	45325	CalAm - Parkway	3410017	011	The Rockhurst well periodically shows evidence of raw water total coliform presence an indicator of microbial contamination	We propose t initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	45325	CalAm - Parkway	3410017	012	The Conrad well periodically shows evidence of raw water total coliform presence, an indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	45325	CalAm - Parkway	3410017	013	The Briggs well periodically shows evidence of raw water total coliform presence, an indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	3	45325	CalAm - Parkway	3410017	014	TheStocker well periodically shows evidence of raw water total coliform presence, an indicator of microbial contamination	To initiate a planning study to inventory PCAs, vulnerability analysis, provide public outreach and education programs along with program elements associated with CDWSAPP	$95,000	2000
	0	58200	North Marin Water District	2110003	024	Microbial pollution potential from older sewage collection system/force main serving golf course on watershed of Stafford water treatment plant.	Update system to current standards with pumping redundancy and spill protection.	$100,000	2000
	0	58200	North Marin Water District	2110003	022	Microbial from failing septic systems in zone A of Stafford Lake.	Seek voluntary repair of failing septic systems through a low interest loan program to qualified residents on Stafford watershed.	$50,000	2000
Total of projects in SWPP Category SWWP-H = 15 projects									
Total Cost for Projects in Category SWWP-H :						**$2,345,000**			
SWWP-I	5	7200	Los Osos Community Services District	4010016	002	Evaluation of Agricultural practices-See attachment A	See attachment A	$100,000	2001
Total of projects in SWPP Category SWWP-I = 1 project									
Total Cost for Projects in Category SWWP-I :						**$100,000**			

SWP	BP	Pop.	WaterSystem Name Project No	WS Problem	Project Description	Costs	FY

Number of projects in SWP PPL= 49 projects **Grand Total:** **$31,587,000**

Notes: